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EXAMINER

GREY, CHRISTOPHER P

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/798,412	Applicant(s) RADI ET AL.	
	Examiner CHRISTOPHER P. GREY	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/7/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-8, 12, 14, 16-19, 22-24, 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Franklin (US 7092364)

Regarding claim 1, Franklin discloses receiving at said NMS (**fig 2, 212, notice that NMS receives**) a user request (**fig 2, 212, NMS receives request**) for a hierarchy altering operation (**fig 2, 210 and 212, provisioning of VC is equivalent to altering operation**), said user request comprising topology change data (**fig 2, 212, where a request for provisioning of a VC is equivalent to topology change data**);

verifying validity (**fig 2, 214, EMS identifies/verifies, and Col 8 lines 10-12, NMS uses info to send request to EMS**) of said user request (**fig 2, 214, EMS receives request**) with respect to each EMS (**fig 1, 156 and 158 shows EMS's**) against a set of rules and limitations associated with said respective EMS (**Col 8 lines 10-12, where the rules and limitation are equivalent to the using inventory info from previous provisioning...**), and, after said user request has been validated:

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altering said network topology map according to said topology change data in said user request (**Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS**);

automatically sending, from said NMS to said EMS (**fig 2, 222, send from NMS to EMS**), a change request (**fig 2, 222, NMS fwds request to EMS**) comprising said topology change data (**fig 2, 222, provisioning of PVC is equivalent to topology change info**); and

updating said EMS topology map according to said change request. (**Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS**)

Regarding claim 2, Franklin discloses sending an acknowledgement from said EMS to said NMS to inform said NMS that said EMS topology map has been updated (**Col 8 lines 43-45, where the EMS fwds info indicating that PVC is complete...thus an ACK**).

Regarding claim 3, Franklin discloses wherein said topology change data refers to at least one of adding, upgrading, moving, removing, and renaming a network entity (**Col 8 lines 28-30, where the info logged at each network element includes the creation of a PVC, which is a topological change to the involved nodes**).

Regarding claim 4, Franklin discloses wherein said network entity is selected from the group consisting of a node group, a network and a network element (**fig 1, notice ATM switches and DSLAM's equivalent to network entities**).

Regarding claim 6, Franklin discloses wherein said step of verifying validity of said request comprises checking the syntax (**Col 8 lines 10-12, where the NMS uses/checks inventory info of previous info, equivalent to syntax info**) and the completeness of said user request (**Col 8**

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lines 13-15, where the multiplexor being identified from the request is equivalent to checking the completeness of the request).

Regarding claim 7, Franklin discloses wherein said step of verifying comprises checking a location identification data in said user request **(Col 8 lines 13-18, where the request is received a multiplexor identification is identified).**

Regarding claim 8, Franklin discloses wherein said location identification data provides provide the hierarchical location of a network entity to which said topology change data are applied **(Col 8 lines 13-17, where the identification is taken from the request, and used to route configuration data/topology change to the multiplexor/NE).**

Regarding claim 12, Franklin discloses further comprising the step of comprising, identifying at said NMS which EMS is affected by said user request, for selectively sending said change request to said affected EMS managing one or more affected network elements **(Col 8 lines 3-7, where the NMS fwds the request to the EMS's that are dedicated to managing the network elements specified by the request).**

Regarding claim 14, Franklin discloses receiving at said EMS a user request for a hierarchy altering operation **(fig 2, 214, where EMS receives request for setting up connection),**

said user request comprising topology change data pertinent to a network entity **(Col 8 lines 13-16, where the request contains configuration info for a multiplexor/NE);**

automatically sending, from said EMS to said NMS, a change request comprising topology change data **(fig 2, 218, where the EMS send to the NMS configuration data**

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equivalent to a request, which is further stored within the topology database according to Col 8 lines 49-52);

at said NMS, verifying validity of said user request (**Col 8 lines 10-13, where the NMS uses info to send a request to the EMS**) with respect to each EMS against a set of rules and limitations associated with said respective EMS (**Col 8 lines 10-12, where the rules and limitation are equivalent to the using inventory info from previous provisioning...**); and

after said user request has been validated, altering said network topology map according to said topology change data in said user request (**Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS**).

Regarding claim 16, Franklin discloses a network topology map (**Col 7 lines 65-66, NMS comprises a database**) comprising all network entities in said communication network and hierarchical information on locations of said network entities (**Col 7 lines 66-67, database identifying the network composition at both the physical and logical level**);

a user interface for enabling said NMS to receive (**fig 2, 212, notice that NMS receives**) a user request (**fig 2, 212, NMS receives request**) comprising topology change data pertaining to a specified network entity (**fig 2, 212, where a request for provisioning of a VC between a user/switch is equivalent to topology change data of NE**);;

means for verifying validity (**fig 2, 214, EMS identifies, verifies**) of said user request (**fig 2, 214, EMS receives request and Col 8 lines 10-12, NMS uses info to send request to**

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EMS) relative to each EMS (fig 1, 156 and 158 shows EMS's) against a set of rules and limitations associated with said respective EMS (Col 8 lines 10-12, where the rules and limitation are equivalent to the using inventory info from previous provisioning...);

means for changing said network topology map according to said topology change data after said user has been validated **(Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS);;** and

means for generating from said user request a change request **(fig 2, 222, NMS forwards request to EMS)** comprising said topology change data **(fig 2, 222, provisioning of PVC is equivalent to topology change info)** and automatically sending said change request **(fig 2, 222, request)** to an Element Management System **(fig 1, 156 or 158)** affected by said user request **(fig 2, 222, request is sent from NMS to EMS).**

Regarding claim 17, Franklin discloses wherein said hierarchical information on location of said network entities provides a location of a network element in the-at least one of an entire network, in-a node group made a network node **(Col 8 lines 28-30, where the info logged at each network element includes the creation of a PVC, which is a topological change to the involved nodes).**

Regarding claim 18, Franklin discloses wherein said -network topology map is stored in a NMS database **(Col 7 lines 63-67, see database associated with NMS for storing network composition).**

Regarding claim 19, further comprising means for identifying said EMS affected by said user request **(Col 8 lines 7-10, where the NMS forwards data to the EMS**

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associated with the NE within the requests, which is equivalent to identifying the EMS associated with).

Regarding claim 22, Franklin discloses an EMS topology map (**Col 8 lines 49-53, where information is stored in EMS when different configurations are formed**) including a subset of network entities and hierarchical information on location of said network entities in said subset (**Col 8 lines 49-53, where information is stored in EMS when different configurations are formed**);

means for receiving from said NMS a change request (**fig 2, 212-214, EMS receives request from NMS**) comprising topology change data (**fig 2, 212, request involves provisioning of VC**);

means for verifying validity of a user request (**fig 2, 214, EMS identifies/verifies, and Col 8 lines 10-12, NMS uses info to send request to EMS**) with respect to each EMS against a set of rules and limitations associated with said respective EMS (**Col 8 lines 10-12, where the rules and limitation are equivalent to the using inventory info from previous provisioning...**) before sending the user request to each EMS (**Col 8 lines 10-13, after using the info, then the request is sent to the EMS**) and means for changing said EMS topology map according to said topology change data (**Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS**);

Regarding claim 23, Franklin discloses further comprising a user interface (**see fig 1, 154 showing monitor as user interface**) for enabling said EMS to receive a user request comprising

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said topology change data pertaining to a specified network entity in said subset of network entities (**fig 1, 212-214, user request is sent from NMS to EMS pertaining to a multiplexor**).

Regarding claim 24, Franklin discloses further comprising means for automatically sending said user request to NMS (**fig 2, 218, where the EMS send to the NMS configuration data equivalent to a request, which is further stored within the topology database according to Col 8 lines 49-52**).

Regarding claim 27, receiving at said NMS (**fig 2, 212, notice that NMS receives**) a user request (**fig 2, 212, NMS receives request**) for a resynchronization of said network topology map with said EMS topology map;

verifying validity (**fig 2, 214, EMS identifies, verifies**) of said user request (**fig 2, 214, EMS receives request and Col 8 lines 10-12, NMS uses info to send request to EMS**) with respect to each EMS (**fig 1, 156 and 158 shows EMS's**) against a set of rules and limitations associated with said respective EMS (**Col 8 lines 10-12, where the rules and limitation are equivalent to the using inventory info from previous provisioning...**); and, after said user request has been validated:

automatically sending, from said NMS to each of said EMS's affected by said request(**fig 2, 222, NMS fwds request to EMS**), updating topology data relevant to said affected EMS(**Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS**) and;

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updating each said EMS topology map of each said affected EMS according to said updating topology data (**Col 8 lines 48-52, where the actions performed as a result of the requests are stored in a database at each network element, EMS and NMS**);.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin (US 7092364) as applied to the claims above, and further in view of Papoushado US (2005/0013259)

Regarding claim 5, Franklin does not specifically disclose the step of providing an error message whenever said user request is invalid.

Papoushado discloses the step of providing an error message whenever said user request is invalid (**Para 0055, where the EMS reports whether or not the connection solution was found, where a negative report indicates an error**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the system for monitoring provisioning of Franklin, as taught

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by Papoushado, since stated in Para 0055, that such a modification will assist in finding a connectivity solution.

5. Claims 9-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin and Papoushado as applied to the claims above, and further in view of Walters (US 20040030780).

Regarding claim 9, The combined teachings of Franklin and Papoushado do not specifically disclose wherein said error message specifies that said user request includes invalid characters.

Walters discloses wherein said error message (**fig 2, 210, where the NO option indicates invalid request**) specifies that said user request includes invalid characters (**fig 2, 210 and 220, where it is clear from 220 that there exists an irrelevant/invalid portion of the ID that causes the request to be invalid**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Franklin and Papoushado, as taught by Walters, since stated in Para 0006 that such a modification will resolve erroneous or invalid resource identifiers.

Regarding claim 10, The combined teachings of Franklin and Papoushado do not specifically disclose wherein said error message specifies that said user request includes incorrect location identification data.

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Walters discloses wherein said error message specifies that said user request includes incorrect location identification data (**fig 2, where 220, shows relevant ID, where from relevant ID, it is clear that the irrelevant/incorrect data is evident**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Franklin and Papoushodo, as taught by Walters, since stated in Para 0006 that such a modification will resolve erroneous or invalid resource identifiers.

Regarding claim 11, The combined teachings of Franklin and Papoushodo do not specifically disclose wherein said incorrect location identification data comprise at least one of an incorrect network entity name, an incorrect specification of network entities and a missing name for a network entity.

Walters discloses wherein said incorrect location identification data comprise at least one of an incorrect network entity name, an incorrect specification of network entities and a missing name for a network entity (**fig 2, notice invalid ID**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Franklin and Papoushodo, as taught by Walters, since stated in Para 0006 that such a modification will resolve erroneous or invalid resource identifiers.

6. Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin as applied to the claims above, and further in view of Sundaram (US 6564341)

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Regarding claim 13, Franklin does not specifically disclose the steps of: cyclically checking the state of said EMS, storing said change request whenever said EMS is temporarily in an "off state", and providing said change request to said EMS when said EMS is back in an "on state".

Sundaram discloses the steps of: cyclically checking the state of said EMS (**COI 15 lines 19-21, periodic/cyclic polls**), storing said change request **Col 15 lines 29-31, where the polls are continuously resent, so are thus stored in some form**) whenever said EMS is temporarily in an "off state" (**Col 15 lines 18-25, where the communication loss between the NMS and EMS is equivalent to an OFF state**), and providing said change request to said EMS (**Col 15 lines 29-33, where the polling request are sent until problem no longer exists**) when said EMS is back in an "on state" (**Col 15 lines 31-32, polling requests come back with response**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the teachings of Franklin, as taught by Sundaram, since stated in the abstract that such a modification will prevent overloading.

Regarding claim 26, Franklin does not specifically disclose the steps of: cyclically checking the state of said EMS, storing said change request whenever said EMS is temporarily in an "off state", and providing said change request to said EMS when said EMS is back in an "on state".

Sundaram discloses the steps of: cyclically checking the state of said EMS (**COI 15 lines 19-21, periodic/cyclic polls**), storing said change request **Col 15 lines 29-31, where the polls are continuously resent, so are thus stored in some form**) whenever said EMS is temporarily in an "off state" (**Col 15 lines 18-25, where the communication loss between the NMS and EMS is equivalent to an OFF state**), and providing said change request to said EMS (**Col 15**

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lines 29-33, where the polling request are sent until problem no longer exists) when said EMS is back in an "on state" (**Col 15 lines 31-32, polling requests come back with response**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the teachings of Franklin, as taught by Sundaram, since stated in the abstract that such a modification will prevent overloading.

7. Claims 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin as applied to the claims above, and further in view of Naik US 2003/0133556

Regarding claim 15, Franklin does not disclose wherein the EMS disables any subsequent user requests involving the topology change data from the EMS, for enabling user request pertinent to the network entity from one localized place.

Naik et al from the same or similar field of endeavor, teach wherein the EMS disables any subsequent user requests involving the topology change data from the EMS, for enabling user request pertinent to the network entity from one localized place (0154).

Thus, it would have been obvious to someone of ordinary skill the art at the time of the invention was disclosed to modify the system of Franklin, as taught by Naik, since stated in the abstract that such a modification will provide an access secure for network management system.

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Regarding claim 25, Franklin does not disclose wherein the EMS disables any subsequent user requests involving the topology change data from the EMS, for enabling user request pertinent to the network entity from one localized place.

Naik et al from the same or similar field of endeavor, teach wherein the EMS disables any subsequent user requests involving the topology change data from the EMS, for enabling user request pertinent to the network entity from one localized place (0154).

Thus, it would have been obvious to someone of ordinary skill in the art at the time of the invention was disclosed to modify the system of Franklin, as taught by Naik, since stated in the abstract that such a modification will provide an access secure for network management system.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franklin as applied to the claims above, and further in view of Walters (US 20040030780).

Regarding claim 21, Franklin does not specifically disclose wherein said means for verifying comprises a list of syntax errors, invalid characters, and empty node group names

Walters discloses wherein said means for verifying comprises a list of syntax errors, invalid characters, and empty node group names (**fig 2, 230, where the search terms are equivalent to errors or invalidities**).

It would have been obvious to one of ordinary skill in the art at the time of the invention was disclosed to modify the combined teachings of Franklin, as taught by Walters,

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since stated in Para 0006 that such a modification will resolve erroneous or invalid resource identifiers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER P. GREY whose telephone number is (571)272-3160. The examiner can normally be reached on 10AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2616

/Christopher P Grey/
Examiner, Art Unit 2616